CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on the below date:

Date: 4/16/07 Name: Richard G. Lione, Reg. No. 19,795 Signature: Richard G. Lione

AF

JRW

BRINKS HOFER GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: MASAYUKI ADACHI ET AL.

Appln. No.: 10/508,888

Examiner: Andrew T. Piziali

Filed: September 23, 2004

Art Unit: 1771

For: HIGH FLAME RESISTANT UNION FABRIC

Attorney Docket No: 5404/92

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Sir:

Attached is/are:

☒ Transmittal (in Duplicate); Petition and Fee for Extension of Time (in Duplicate); and Request for Reconsideration.

☒ Return Receipt Postcard

Fee calculation:

☒ No additional fee is required.

☐ Small Entity.

☒ An extension fee in an amount of $120 for a one-month extension of time under 37 C.F.R. § 1.136(a).

☐ A petition or processing fee in an amount of $_____ under 37 C.F.R. § 1.17(_____).

☐ An additional filing fee has been calculated as shown below:

						Small Entity			Not a Small Entity	
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra		Rate	Add'l Fee	or	Rate	Add'l Fee
Total		Minus				x $25=			x $50=	
Indep.		Minus				x 100=			x $200=	
First Presentation of Multiple Dep. Claim						+$180=			+ $360=	
						Total	$		Total	$

Fee payment:

☐ A check in the amount of $_____ is enclosed.

☒ Please charge Deposit Account No. 23-1925 in the amount of $120. A copy of this Transmittal is enclosed for this purpose.

☐ Payment by credit card in the amount of $_____ (Form PTO-2038 is attached).

☒ The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this paper (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

April 16, 2007
Date

Respectfully submitted,

Richard G. Lione
Richard G. Lione (Reg. No. 19,795)

☒ is other than small entity.

	Extension Months	Other Than Small Entity	Small Entity
☒	One Month	$120.00	$60.00
☐	Two Months	$450.00	$225.00
☐	Three Months	$1,020.00	$510.00
☐	Four Months	$1,590.00	$795.00
☐	Five Months	$2,160.00	$1,080.00

Fee Payment

☐ Attached is a check for $_____ for the Petition fee.

☐ Attached is a credit card authorization form for $_____ for the Petition fee.

☒ Charge Petition fee to Deposit Account No. 23-1925. A duplicate copy of this Petition is attached.

☒ Charge any additional fee required or credit for any excess fee paid to Deposit Account No. 23-1925. A duplicate copy of this Petition is attached.

Respectfully submitted,

Dated: 4/16/2007

Richard G. Lione
Registration No. 19,795
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610
(312)321-4200

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Alexandria, VA 22313-1450
on April 16, 2007
Date of Deposit

Richard G. Lione, Reg. No. 19,795
Name of applicant, assignee or
Registered Representative

Richard G. Lione
Signature

4-16-07
Date of Signature

Our Case No. 5404/92

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

MASAYUKI ADACHI ET AL.

Serial No.: 10/508,888

Filing Date: September 23, 2004

For: HIGH FLAME RESISTANT UNION FABRIC

Examiner: Andrew T. Piziali

Group Art Unit No.: 1771

REQUEST FOR RECONSIDERATION

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In reply to the Office Action of December 14, 2007, please consider the following arguments and evidence. Claims 1 and 2 remain in the application and stand rejected under 35 U.S.C. § 103(a) over Ichibori (''796) in view of the disclosure of the present application.

Regarding the Ichibori reference, it discloses a compound yarn comprising a halogen-containing flame resistant fiber (A) including an antimony compound, and another fiber (B), which corresponds to the compound yarn (A) used in the present

invention. The compound yarn (A) comprises a halogen-containing flame resistant fiber (a-1) including an antimony compound, and another fiber (a-2). Contrary to the claimed invention, however, the fabric disclosed in Ichibori is composed of the aforesaid compound yarn alone, used both as warp and weft (see column 7, lines 33 to 39). Ichibori does not disclose any fabric composed of the aforedescribed compound yarn and a cellulosic fiber yarn. In other words, Ichibori does not disclose or suggest the fabric which corresponds to the union fabric of the present invention, a fabric composed of a compound yarn (A) and a cellulosic fiber yarn (B)!

The flame resistant union fabric of the present invention has a very high degree of flame resistance. The fabric is capable of passing the Class M1 level of NF P 92-503 combustion test in France. The compound yarn (A) used in the present invention is composed of a halogen-containing flame resistant fiber (a-1), as well as another fiber (a-2), including a combustible fiber such as cotton and ravon. The compound yarn (A) would have a much poorer flame resistance than a yarn composed of a halogen-containing flame resistant fiber (a-1) alone, because the compound yarn (A) contains a combustible yarn. Ichibori effectively shows that the flame resistance (LOI value) of a composite fiber composed of a halogen-containing flame resistant fiber (a-1) and cotton fiber (a-2) decreases with an increasing blending ratio of cotton fiber (see Fig. 1)!

Furthermore, in the case of a union fabric wherein the flame resistant compound yarn (A) is used as one of warp yarn and weft yarn, and the cellulosic fiber yarn (B) is used as the other, a large amount of non-flame resistant cellulosic fiber yarn (B) is disposed to the fabric surface. From that alone it would be expected that the union fabric would have poor flame resistance.

From such teachings and expectations, applicants submit that those skilled in the relevant art would find it unexpected that the use of compound yarn (A) which is composed of a halogen-containing flame resistant fiber (a-1) including antimony oxide, and another fiber (a-2) such as cotton fiber (and satisfies the specific elongation percentage) in a union fabric wherein the compound yarn (A) is used as either of warp yarn and weft yarn and the cellulosic fiber yarn (B) is used as the other, provides high degree of flame resistance, i.e., is capable of passing Class M1 of NF P 92-503 combustion test. A person skilled in the art would have no motivation to use the compound yarn composed of a halogen-containing flame resistant fiber (a-1) including

antimony oxide and another fiber (a-2) which is disclosed in Ichibori in a union fabric wherein the compound yarn (A) is used as either of warp yarn and weft yarn and the cellulosic fiber yarn (B) is used as the other.

Applicants, however, have been discovered that the use of the compound yarn (A) (with the proviso that it satisfies the presently claimed specific elongation percentage) in a union fabric wherein the compound yarn (A) is used as either of warp yarn and weft yarn and the cellulosic fiber yarn (B) is used as the other provides high degree of flame resistance, for instance, is capable of passing Class M1 of NF P 92-503 combustion test. This is an unexpected and surprising result; one which is explained only by the invention disclosures in the instant specification.

In the latter regard, it is apparent from the results of Table 1 on page 15 of the instant specification that the use of compound yarn (A) prepared in Manufacturing Examples 1, 2 or 3, which is composed of a halogen-containing flame resistant fiber (a-1) including antimony oxide and cotton fiber (a-2) and has an elongation percentage of 0%, in a union fabric with spun yarn (B) of cotton, provides a high degree of flame resistance which passes Class M1 of NF P 92-503 combustion test (Examples 1 to 3). Also, the use of compound yarn (A) prepared in Manufacturing Examples 4, 5 or 6, which is composed of a halogen-containing flame resistant fiber (a-1) including antimony oxide and rayon fiber (a-2) and has an elongation percentage of 0%, in a union fabric with spun yarn (B) of rayon, provides a high degree of flame resistance which passes Class M1 of NF P 92-503 combustion test (Examples 4 to 6). On the other hand, the use of spun yarn prepared in Comparative Manufacturing Example 1, which is composed of a halogen-containing flame resistant fiber (a-1) alone and has an elongation percentage of 35%, in a union fabric with spun yarn (B) of cotton, provides a low degree of flame resistance which does not pass a Class M1 of NF P 92-503 combustion test (Comparative Example 1).

Applicants submit that the invention defined specifically and narrowly by Claims 1 and 2 carefully and clearly distinguishes the prior art relied upon in the final rejection. Reconsideration of the rejection and allowance of the claims should, it is respectfully submitted, be the result.

Respectfully submitted,

Richard G. Lione

Richard G. Lione
Registration No. 19,795
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200